

WHAT IS CLAIMED IS

1. A radar system including an oscillator constituted  
by a high frequency IC with a built-in FET, sending out  
electromagnetic waves to the outside, receiving an echo  
5 from a target, and detecting a relationship with said target  
on the basis of the received echo signal, comprising:

a plurality of power supplies for forming respective  
different output voltages, wherein either of said power  
supplies is used as a gate power supply of said FET of said  
10 high frequency IC, and the other one of said power supplies  
is used as a drain power supply of said FET;

a voltage monitoring means for detecting whether the  
output voltages of said power supplies are within respective  
specified ranges or not, and

15 a power supply control means for turning off said drain  
power supply of said FET among said power supplies when  
it is detected by said voltage monitoring means that even  
either of output voltages of said power supplies is not  
within said specified range.

20 2. A radar system including an oscillator constituted  
by a high frequency IC with a built-in FET, sending out  
electromagnetic waves to the outside, receiving an echo  
from a target, and detecting a relationship with said target  
on the basis of the received echo signal, comprising:

25 a plurality of power supplies for forming respective

different output voltages, wherein either of said power supplies is used as a gate power supply of said FET of said high frequency IC, and the other one of said power supplies is used as a drain power supply of said FET; and

5        a power supply control means for controlling said gate and drain power supplies at the rise time so that an output voltage of said gate power supply rises earlier than that of the drain power supply .

3. A radar system according to Claim 2, wherein said  
10 power supply control means includes a timer circuit, and said output voltage of said gate power supply is controlled by time measurement by said timer circuit so as to rise earlier than that of said drain power supply.

4. A radar system including an oscillator constituted  
15 by a high frequency IC with a built-in FET, sending out electromagnetic waves to the outside, receiving an echo from a target, and detecting a relationship with said target on the basis of the received echo signal, comprising:

20        a plurality of power supplies for forming respective different output voltages, wherein either of said power supplies is used as a gate power supply of said FET of said high frequency IC, and the other one of said power supplies is used as a drain power supply of said FET; and

25        a power supply control means for controlling said gate and drain power supplies at the fall time so that an output

voltage of said gate power supply falls later than that of said drain power supply.

5        5. A radar system according to Claim 2, said power supply control means has also a function for controlling said gate and drain power supplies at the fall time so that an output voltage of said gate power supply falls later than that of said drain power supply.

10       6. A radar system according to Claim 4, wherein said power supply control means includes a discharge circuit for discharging the drain power line, and said output voltage of said drain power supply is controlled so as to fall earlier than that of said gate power supply by discharging said drain power line.

15       7. A car radar system comprising a radar system stated in Claim 1, wherein said radar system is provided in a car, sends out electromagnetic waves outside said car, receives an echo from a target outside said car, and detecting a relationship with said target on the basis of the received echo signal.